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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/035,914	11/07/2001	David E. Weinstein	96700/677	2216

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EXAMINER	
CHEN, LIPING	

ART UNIT	PAPER NUMBER
1632	

DATE MAILED: 11/05/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/035,914	Applicant(s) WEINSTEIN, DAVID E.	
	Examiner Liping Chen	Art Unit 1632	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-34 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) 1-34 are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Election/Restriction

Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1, 2, 5-10, and 25-27, drawn to a method for treating astrocytosis comprising administering to the subject an effective amount of CD81drawn to a method for inhibiting proliferation of astrocytes comprising contacting astrocytes with an amount of CD81 protein, classified in 514, subclass 12.

II. Claims 1, 3, 4, and 28-30, drawn to a method for treating astrocytoma comprising administering to the subject an effective amount of CD81 drawn to a method for inhibiting proliferation of astrocytes comprising contacting astrocytes with CD81 by introducing into the astrocytes a nucleic acid encoding CD81 *in vitro*, classified in 435, subclass 7.1.

III. Claims 1, 3-9 and11-12, drawn to a method for inhibiting proliferation of astrocytes comprising contacting astrocytes with CD81 by introducing into the astrocytes a nucleic acid encoding CD81 *in vivo*, classified in 514, subclass 44.

IV. Claims 1, 3-9 and11-12, drawn to a method for inhibiting proliferation of astrocytes comprising contacting astrocytes with CD81 by introducing into the astrocytes a nucleic acid encoding CD81 *ex vivo*, classified in 424, subclass 93.21.

V. Claims 13, 14 and 17-22, drawn to a method for inhibiting proliferation of astrocytic tumor cells comprising contacting astrocytic tumor cells with an amount of CD81 protein, classified in 514, subclass 12.

VI. Claims 13 and 15-16, drawn to a method for inhibiting proliferation of astrocytic tumor cells comprising contacting astrocytic tumor cells with CD81 by introducing into the astrocytic tumor cells a nucleic acid encoding CD81 *in vitro*, classified in 435, subclass 7.1.

VII. Claims 13, 15-21 and 23-24, drawn to a method for inhibiting proliferation of astrocytic tumor cells comprising contacting astrocytic tumor cells with CD81 by introducing into the astrocytic tumor cells a nucleic acid encoding CD81 *in vivo*, classified in 514, subclass 44.

VIII. Claims 13, 15-21 and 23-24, drawn to a method for inhibiting proliferation of astrocytic tumor cells comprising contacting astrocytic tumor cells with CD81 by introducing into the astrocytic tumor cells a nucleic acid encoding CD81 *ex vivo*, classified in 424, subclass 93.21.

IX. Claims 31-34, drawn to a method for assaying for CD81 expression *in vitro*, classified in 435, subclass 4+.

X. Claims 31-34, drawn to a method for assaying for CD81 expression *in vivo*, classified in 514, subclass 2.

The inventions are distinct, each from the other because:

Group I and groups II-IV are distinct from each other because they are drawn to materially different methods using compositions having different chemical structures, physical properties and biological functions: CD81 protein or a nucleic acid encoding CD81 protein, which have different classifications and require separate search. They are not obvious variants and deemed patentably distinct.

Groups II-IV are distinct from each other because they are drawn to distinct methods comprising different gene delivery as in vitro, in vivo, or ex vivo, which have different classification and require separate search. These methods differ at least in method steps, reagents and/or dosages, and/or schedules used, response variables, criteria for success. Thus, groups II-IV are patentably distinct from each other.

Group V and groups VI-VIII are distinct from each other because they are drawn to materially different methods using compositions having different chemical structures, physical properties and biological functions: CD81 protein or a nucleic acid encoding CD81 protein, which have different classifications and require separate search. They are not obvious variants and deemed patentably distinct.

Groups VI-VIII are distinct from each other because they are drawn to distinct methods comprising different gene delivery as in vitro, in vivo, or ex vivo, which have different classifications and require separate search. These methods differ at least in method steps, reagents and/or dosages, and/or schedules used,

response variables, criteria for success. Thus, groups VI-VIII are patentably distinct from each other.

Groups I-IV and groups V-VIII are distinct from each other because they are drawn to methods comprising different populations: normal astrocytes or astrocytic tumor cells, which are physically, functionally different and are regulated differently. These methods differ at least in objectives, reagents and/or dosages, and/or schedules used, response variables, and criteria for success. Thus, groups I-IV and V-VIII are patentably distinct from each other.

Groups I-VIII and groups IX-X are distinct from each other because they are drawn to materially distinct methods . These methods differ at least in objectives, reagents and/or dosages, and/or schedules used, response variables, and criteria for success. Thus, groups I-VIII and groups IX-X are patentably distinct from each other.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, because of their recognized divergent subject matter, and the search required for any group is not required for remaining groups, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).)

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Liping Chen, whose telephone number is (703) 305-4842. The examiner can normally be reached on Monday through Friday from 8:00 to 5:00 (Eastern Standard Time). Should the examiner be unavailable, inquiries should be directed to Deborah Reynolds, Supervisory Primary Examiner of Art Unit 1632, at (703) 305-4051. Any administrative or procedural questions should be directed to Pauline Farrier, Patent Analyst, at (703) 305-3550. Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notice

published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CM1 Fax Center number is (703) 308-8724.

Liping Chen, Ph.D.
Patent Examiner
Group 1632

Deborah Reynolds
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